



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,087	10/19/2001	Leonard Arnold Duffy		9503

7590  
Leonard Duffy  
P O Box 99  
Hinesburg, VT 05461

03/28/2003

EXAMINER

BRITTAIN, JAMES R

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/015,087

Applicant(s)

DUFFY, LEONARD ARNOLD

Examiner

James R. Brittain

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 35-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6, 8, 9, 12, 13, 15, 17, 19, 20, 22, 24-31, 33, 34 and 44-47 is/are rejected.
- 7) ☒ Claim(s) 3, 5, 7, 10, 11, 14, 16, 18, 21, 23 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Election/Restrictions***

Applicant's election with traverse of Group I in Paper No. 6 is acknowledged. The traversal is on the ground(s) that even though production of embodiments of the invention by a rotary cutting tool, as discussed on page 4, line 12 of the specification, may be possible with certain types of materials; such a method and apparatus would be significantly more costly than production by the claimed method because rotary cutting tools are generally economical for prototype and relatively low volume production only (Remarks, page 2, ¶3). Further, applicant argues that many materials contemplated for use would clog the cutter, are not suitable for machining, or result in products having diminished strength or other characteristics (Remarks, page 2, ¶4-5). In summary, applicant argues that the product cannot be economically made in like quality of diverse materials by another materially different process in accordance with the objects of the invention. This is not found persuasive because the standard for making the restriction is comparing the article as claimed with the method as claimed and apparatus as claimed and not whether the product can be made by another materially different process in what applicant considers to be a desirable economic result or for a broad variety of materials. What applicant considers being insufficient economic incentive is not a reason to join the groups since there may be compelling incentives to have coverage for more specifically targeted methods and apparatus usable on materials with high quality machining characteristics giving rise to tight tolerances. Since the alternative apparatus and method of using a rotary cutting tool is a recognized

alternative to applicant's claimed apparatus and method and applicant indicates that production of embodiments of the invention by a rotary cutting tool, as discussed on page 4, line 12 of the specification, may be possible with certain types of materials, the restriction is appropriate and stands. Since applicant elected the article of Group I, the requirement for election of species from Group II is moot.

The requirement is still deemed proper and is therefore made FINAL.

Claims 35-43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

### ***Priority***

If applicant desires priority under 35 U.S.C. 119(e) based upon a previously filed application, specific reference to the earlier filed application must be made in the instant application. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph unless it appears in an application data sheet. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. \_\_\_\_" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Commissioner may require additional information where there is a question whether the

Art Unit: 3677

delay was unintentional. The petition should be directed to the Office of Petitions, Box DAC, Assistant Commissioner for Patents, Washington, DC 20231.

Applicant has made reference to two provisional applications on page 1 of the specification. This is interpreted as an attempt to claim priority that needs to be perfected. However, the claim of priority is not merely a reference to the applications but needs to be explicit. In applications claiming priority under 35 U.S.C. 119(e), a statement such as "This application claims the benefit of U.S. Provisional Application No. 60/ - --, filed - --" should appear as the first sentence of the description or in an application data sheet. See MPEP 1302.04. Applicant needs to amend the reference to the two applications so that there is a clear priority claim and also indicate in applicant's remarks that the interpretation that a priority claim is made in the application is verified. The case is being examined on the assumption of the priority claim being perfected. Further it appears that applicant's reference to 60/228,780 has a typographical error and should refer to 60/288,780. Correction should be made.

### ***Specification***

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.72(b). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification is objected to because the term "bilateral disposition" (claim 2, line 2; claim 13, lines 2-3; claim 20, lines 2-3) lacks antecedent

basis in the specification. The term should be incorporated into the specification and identified by example with structure from one of the embodiments from the figures so that the term is clearly understood. The specification is also objected to because the passages "ones of said stems are associated with at least two of said plurality of first undercut segments" (claim 8, lines 1-2) and "ones of said stems are associated with at least three of said plurality of first undercut segments" (claim 9, lines 1-2) lack antecedent basis in the specification for this usage of "associated". They should be incorporated with elaboration into the specification because the stems are located on the second portion while the first undercut segments are located on the first portion so that the stems are only associated with the first undercut segments when the two portions are slidingly engaged. Explanation of the extent of association should be incorporated into the specification so as to clarify these claims.

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference numeral 04 identified as being in figure 6 (page 19, line 7) is not found in figure 6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 11 and 13-18 are objected to because of the following informalities:  
Claim 11 is objected to because the term "said portion" (line 1) lacks antecedent basis

Art Unit: 3677

since it can refer to either the first or second portion. Claims 13-18 are objected to because the passages "said plurality of first islands" (claim 13, lines 1, 4-5; claim 14, lines 1, 4-5; claim 15, lines 1, 4-5; claim 16, lines 1, 4-5; claim 17, lines 1, 4; claim 18, line 1) lacks clear antecedent basis. Claim 12 recites "at least one first island" (line 5). The identified passage in claims 13-18 lacks antecedent basis because the scope of claim 12 includes just a single island and when there is but a single island the plural lacks antecedent basis. It is suggested that applicant amend claims 13-18 to positively include "a plurality of first islands" prior to using the language "said plurality of first islands". Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 8, 9, 12, 13, 15, 19, 20, 22, 44, 45 and 47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Allan (US 5555608).

Allan (figures 8, 9) teaches a slidingly engageable fastening device operable upon application of a relative shearing force through the loose nesting of the ridges 80 as shown in figure 9 and described in col. 7, line 1, comprising: a first portion 86 that includes; a first base having a first basal surface; and a plurality of first undercut segments spaced from said first basal surface; and a second portion 92 for slidingly engaging with said first portion upon application of a relative shearing force with respect



Art Unit: 3677

to said first and second portions via the loose nesting, said second portion including: a second base having a plurality of fenestrations and a second basal surface; a plurality of stems each having a first end attached to said second base and a second end distal from said second basal surface; and at least one second undercut segment attached to each of said plurality of stems at said second end and extending away from said each stem. As to claims 2, 4, 13, 15, 19, 20, and 22, the stems as shown in figure 8 form groups of four and are bilateral with each undercut hook forming an aperture. In regard to claims 8 and 9, the stems are associated with the opposite undercuts when joined as shown in figure 9. As to claims 45 and 47, Allan suggests using the fastener on different sections or portions of footwear.

Claims 33 and 34 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Akeno (US 5797170).

Akeno (figures 9, 10) teaches an interlocking device for engaging a plurality of first islands, comprising: a base having a plurality of fenestrations 20a and a basal surface; and a plurality of second islands 30 attached to said base and defining a plurality of apertures for receiving the plurality of first islands, each of said plurality of second islands including at least three of said undercut segments spaced from one another. There are four undercuts. As to claim 34, the figures show that the undercuts extend over the fenestrations.

Claims 25, 26, 28, and 29 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hall (US 4531733).

Art Unit: 3677

Hall (figures 14a, 14b) teaches a slidably engageable fastener, comprising: a first portion that includes: a base 202 having a first basal surface and a second basal surface opposite said first basal surface; and a plurality of first islands 206 attached to said base and extending away from said first basal surface, wherein sets of two adjacent said first islands each define an aperture inherently capable of receiving and slidably engaging with a plurality of second islands from the opposite portion; and a plurality of attachment devices 224 engaging said first portion and extending away from said second basal surface. In regard to claims 26, 28 and 29, the attachment devices 224 are considered to be nail-like in that they are pointed, expansion devices in that they are resilient and the head 230 expands back to its unstressed dimensions, and is a friction device since the devices 224 have heads with lips 232 that frictionally engage the material defining the apertures.

Claims 25, 27 and 28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Keeler (US 3526867).

Keeler (figures 1, 2) teaches a slidably engageable fastener, comprising: a first portion that includes: a base 22 having a first basal surface and a second basal surface opposite said first basal surface; and a plurality of first islands 26 attached to said base and extending away from said first basal surface, wherein sets of two adjacent said first islands each define an aperture inherently capable of receiving and slidably engaging with a plurality of second islands from the opposite portion; and a plurality of attachment rivets 30 engaging said first portion and extending away from said second basal surface.

Art Unit: 3677

Claim 31 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Keyaki et al. (US 5655268).

Keyaki et al. (figure 5) teaches a fastening device secured to a substrate material, comprising: a first portion that includes; a first base 12 having a first basal surface and a second basal surface spaced from said first basal surface; and a plurality of first islands 15 attached to said first base and extending away from said first basal surface, wherein adjacent pairs of said plurality of first islands each define an aperture for receiving, and interlocking with, a plurality of second islands in the form of loops; and a backing structure 11 for confronting said second basal surface and being attachable to said first portion by stitching, said backing structure for securing said first portion to the substrate material when said backing structure is attached to said first portion.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 17, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allan (US 5555608) in view of Allan (US 4872242).

Allan (figures 8, 9) teaches a slidingly engageable fastening device operable upon application of a relative shearing force through the loose nesting of the ridges 80 as shown in figure 9 and described in col. 7, line 1, comprising: a first portion 86 that includes; a first base having a first basal surface; and a plurality of first undercut

Art Unit: 3677

segments spaced from said first basal surface; and a second portion 92 for slidingly engaging with said first portion upon application of a relative shearing force with respect to said first and second portions via the loose nesting, said second portion including: a second base having a plurality of fenestrations and a second basal surface; a plurality of stems each having a first end attached to said second base and a second end distal from said second basal surface; and at least one second undercut segment attached to each of said plurality of stems at said second end and extending away from said each stem. The difference is that the stems are arranged linearly and not in chevron configuration. It would have been obvious to modify the fastener to configure the stems in chevron configuration in view of Allan (figure 10) teaching that such a configuration is useful to block lateral sliding of the connector (col. 4, lines 48-59).

Claims 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allan (US 5555608) in view of Sink (US 5943705).

Allan (figures 8, 9) teaches a slidingly engageable fastening device operable upon application of a relative shearing force through the loose nesting of the ridges 80 as shown in figure 9 and described in col. 7, line 1, comprising: a first portion 86 that includes; a first base having a first basal surface; and a plurality of first undercut segments spaced from said first basal surface; and a second portion 92 for slidingly engaging with said first portion upon application of a relative shearing force with respect to said first and second portions via the loose nesting, said second portion including: a second base having a plurality of fenestrations and a second basal surface; a plurality of stems each having a first end attached to said second base and a second end distal

Art Unit: 3677

from said second basal surface; and at least one second undercut segment attached to each of said plurality of stems at said second end and extending away from said each stem. The difference is that the interengaging portions are not spaced by an elastic element. It would have been obvious to utilize the interengaging portions on a strap spaced by an elastic section in view of Sink (figures 3, 4 as described in the abstract) teaching the use of two non-elastic portions positioned at either end of an elastic portion with the two non-elastic portions including hook and loop fasteners for fastening the two non-elastic portions to each other so as to have a readily adjustable strap.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keeler (US 3526867) in view of Kanzaka (US 4521943).

Keeler (figures 1, 2) teaches a slidably engageable fastener, comprising: a first portion that includes: a base 22 having a first basal surface and a second basal surface opposite said first basal surface; and a plurality of first islands 26 attached to said base and extending away from said first basal surface, wherein sets of two adjacent said first islands each define an aperture inherently capable of receiving and slidably engaging with a plurality of second islands from the opposite portion; and a plurality of attachment rivets 30 engaging said first portion and extending away from said second basal surface. The difference is that rivets are used not folding devices. It would have been obvious to utilize folding devices to secure the base to the substrate in view of Kanzaka (figures 1, 2, 9) teaching the common use of folding barbs 4, 13 to secure fasteners to substrates as possessing sufficient strength to provide a good connection with penetrable substrates.

***Allowable Subject Matter***

Claims 3, 5, 7, 10, 11, 14, 16, 18, 21, 23, and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims along with correcting the objections identified above.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents of Shibunushi (US 5596794), Eisenheimer (US 3484907), Kayser et al. (US 3408705), Hattori et al. (US 5671512), Flanagan, Jr. (US 3266113), Anderson (US 2499898), Pacione (US 5382462), Beretta et al. (US 5891549), Eguchi et al. (US 5586372), Allan (US 5088162; US 5345659; US 5179767), Torigoe et al. (US 5598610), and Northrup et al. (US 3471903) teach pertinent fastener structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is 703-308-2222. The examiner can normally be reached on Monday - Friday from 5:30 to 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Art Unit: 3677

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

A handwritten signature in black ink, appearing to read 'J. Brittain', with a stylized flourish at the end.

James R. Brittain  
Primary Examiner  
Art Unit 3677

JRB  
March 24, 2003